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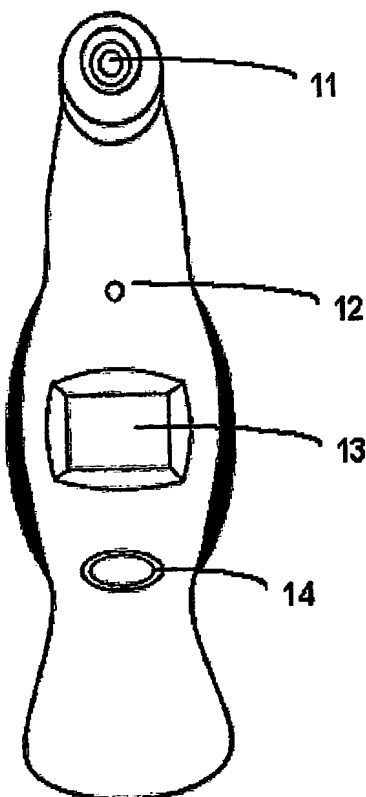
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(54) Title: **AN INFRARED THERMOMETER AND A METHOD FOR DETERMINING A TEMPERATURE**



(57) Abstract: A forehead skin or other body surface skin thermometer (1) has an infrared sensor (11) located in the thermometer probe front for viewing and detecting the infrared radiation heat at a body site, e.g. of the body forehead centre area skin for the other body surface skin. Concurrent operating ambient or sensor operating temperature are also measured. The above measured forehead skin temperature or the other body surface skin temperature is used as a reference base. The above concurrently sensed sensor operating or ambient temperature is used as an index so as to access corresponding temperature of a first body site such as the oral, rectal or axillar temperature. A final temperature reading display is determined from a lookup table built inside a non-volatile memory (41). The lookup table stored in the non-volatile memory (41) comprises three groups of the temperature database derived from a comprehensive clinical test result done previously with a substantial number of measuring targets. The groups composed are a second body site, temperature database, a concurrent operating ambient or sensor operating temperature database, and a corresponding first body site temperature database. Since this lookup table data is based on the substantial numbers of the clinical tests for the above three groups temperature database, this thermometer is a clinical test oriented thermometer design, which provides user with an accurate and reliable measuring result.

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